

2011-2012 Weekly Field Reports

Copacabana, King George Island

Volume 14
January 16, 2012

Science Report:

1. **Penguins:** We banded 250 Adélie penguin chicks and 250 gentoo penguin chicks this week. These chicks will become the 2011-12 cohorts that we will follow in the future for our known-age reproductive and survival study.

The first Adélie penguin chicks were observed leaving the beach on Sunday (1/22), so we began to collect their fledging weights. Chicks on the beach are captured using a hand-held landing net and then weighed. These data will be used to evaluate their condition at fledging, as low weights have been correlated with low over-winter survival.

We also collected gentoo penguin fledging weights on 100 of the 250 chicks that were banded this week (at 85 days after clutch initiation (CID)). The average weight was 4777 grams, about 450 grams greater than the 14-year average. At 85 days post-CID, the chicks are almost fully feathered & semi-independent, but have not yet gone on their first trial foraging trip. Gentoo penguin chicks, unlike Adélie & chinstrap penguins, have a prolonged fledging period, where, as they get older, they go out to feed in the mornings, but still get supplemented by their parents, if necessary, in the afternoons.

We conducted our fifth Adélie penguin diet sample on Monday (1/16). The krill (*Euphausia superba*) continued to consist of unusually large proportions of juvenile krill (39% of the measured sample), but less so than the previous week. The adult krill sizes ranged from 36-51 mm and the majority (66%) was males.

We conducted our third gentoo penguin diet sample on Tuesday (1/17). Unlike the Adélie penguin diets, there were very few juvenile krill (7% of the krill measured), and more females than males in the adult portion (56%). The adult krill sizes, however, were similar to the Adélie penguin samples, ranging from 36-54 mm.

We deployed five more satellite transmitters (PTTs) on gentoo penguins on Friday (1/20). This week we also retrieved all five of the units deployed on gentoo penguins last week.

Our first juvenile macaroni penguin was seen on Monday (1/16) on Copa Beach and our third king penguin of the season was seen on Thursday (1/19) at Patelnia.

2. **Skuas:** All of the south polar skua nests have failed, and the only skuas left with eggs or chicks are the brown skuas defending territories with penguin resources. Currently, we have 14 brown skua nests with eggs or chicks.



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Eight more geolocators (GLS) tags were attached to breeding brown skuas at Point Thomas on Saturday (1/21).

- 3. Snowy Sheathbills:** This week our only resident pair of snowy sheathbills hatched two chicks. This is the first time snowy sheathbills have hatched chicks at Copa since 2006-07.
- 4. Seals and Whales:** We conducted our weekly seal census from Copa to Patelnia on Thursday (1/19) and observed that the fur seals are beginning to return. We counted 23 fur seals, 647 elephant seals (642 juvenile/unknowns and 5 males) and two Weddell seals. On our weekly Copa to Pt. Thomas census on Saturday (1/21), we counted 53 juvenile/unknown elephant seals, five fur seals, and one Weddell seal.

Humpback whales have been sighted in the bay several times this week and on Sunday (1/22), an adult and calf were observed breaching near Copa beach.

Weekly Weather

This week the wind blew a fairly constant 10-15 mph, except on Tuesday (1/17) and Saturday (1/21), when the wind increased to 20-25 mph. Sunday was calm and sunny most of the day. Temperatures ranged from 37-40° F with light precipitation almost every day.

Camp News

The Argentine navy vessel, *Beagle*, delivered Wayne Trivelpiece to Arctowski, the Polish Field Station, on Tuesday (1/17) and on Wednesday (1/18), he arrived at Copa, just after a load of fresh vegetables and propane were dropped off by the Chilean navy vessel, *Oscar Viel*.

The 2011-12 Copa Field Team
Penny Chilton, Field Team Leader
Wayne Trivelpiece, PI
Brette Soucie
Matt Henschen

